

Alcovisor[®] Mercury



Advanced Settings Manual

PAS Systems International, Inc.

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Introduction

This manual contains the passwords and instructions on operating the advanced settings of the Mercury along with the proper procedures to be used for instrument calibration.

Passwords

Default Passwords:

- Calibration: 119119
- Advanced Settings: 112112

The default passwords for advanced settings and calibration can be changed. To change the password please refer to the “Password” section under Advanced Settings in this manual.


WARNING: If you change the password, write it down. The new password must be sent in with your unit if it should need service.

Advanced Settings



Select the Settings icon and then select “Advanced” and input the password 112112.

1. **Blow:** This icon under advanced settings allows the user to change the initiation flow rate (in L/m), blow time (in seconds) and minimum volume (in L). These are already set for optimal performance; it is not recommended that they be changed.
2. **Default:** Select “Yes” under this icon to return instrument to Default settings. Note: Settings have been optimized, it is not recommended to return to Default settings.
3. **Unit:** Set the measurement unit and BAC/BrAC ratio. If unit is changed, the instrument does not need to be recalibrated. It is not recommended that the ratio be changed.
4. **Screening:** Select whether the results from tests performed using the Screening Test Method will be saved in the Test Record Memory of the Mercury.
5. **Delete:** Has the option of deleting ALL saved test records stored in the Mercury. Once you select “Yes”, you cannot restore them.
6. **Field:** Allows user to set up to ten different fields for input/printouts.
 - a. Use stylus pen to select the box to the left of a field if it needs to be shown and printed.
 - b. Use stylus pen to select the box to the right of a field if you want the data you input for that field to be saved until you change it. (For example, if Badge Number is the same for all tests, you can select the box to the right of Badge Number, and the information entered into this field will be remembered for all tests, unless it is changed.)
 - c. Touch the name of a field to input a new name for the field heading.
7. **Alert:** Select the alcohol reading level that will activate an alert. Tests above this level will display in RED and the device will beep.

8. **Password:** The default passwords for advanced settings and calibration can be changed. Select “Cal” or “Advanced Setting” to change the password. Enter the new password and select  to confirm. Screen will display “Password Setting Succeed”.

NOTE: Instrument requires a 6-digit password. If less than six digits are used, password will not store properly.

Warning: If you change the password, write it down. The new password must be sent in with your unit if it should need service.


9. **Calibration Period:**
- Select number of days in the first column and number of tests in the second column that may be allowed to occur before calibration is needed.
 - Select “LOCK” to lock the device if calibration is needed.
 - Default is 360 days, 700 tests and unlocked.

Calibration

PAS recommends all Mercury units be calibrated annually or whenever an accuracy test shows that BAC readings are no longer within tolerance limits. Because precise calibration is crucial, it can be performed only by PAS Systems International or by persons who have been properly trained for alcohol detector calibration. (Calibration of the Mercury **must** be performed using a NHTSA-approved wet bath simulator or certified dry gas standard.) Successful completion of calibration should be recorded in a calibration log.

NOTE: When using dry gas (PAS recommends 0.080% dry gas concentration) for calibration, the alcohol concentration printed on the label of the dry gas cylinder must be corrected to account for altitude when conducting tests at or above an altitude of 250 feet above sea-level. Please refer to the Operating Manual for specific instructions for altitude corrections.



CALIBRATION: (Using an approved Wet Bath Simulator or Certified Dry Gas with proper Regulator)

1. Select the Settings Icon  and select “Cal.”
2. Enter the Password 119119.
3. Select “Calibration”.
4. Enter the concentration of the calibration solution. Accuracy should be to one decimal place. The preset unit is mg/100mL. For example, enter 80.0 for 80mg/100mL or enter 100.0 for a 0.100% solution.

NOTE: Remember to use the High-Altitude Correction Chart (found in the Operating Manual) when calibrating the device using dry gas at locations above 500 feet in elevation.

More examples are in the following table:

Mg/100mL	%	‰ & g/L
20.0	0.02	0.20
50.0	0.05	0.50
80.0	0.080	0.80
100.0	0.10	1.00
150.0	0.15	1.50

5. Select  to confirm.
6. The next screen to appear is the calibration screen. The first line shown is the concentration of the calibration solution. The second line is the temperature (22 to 28). The third line is the calibrated value (to be tested).
7. Connect the Mercury to an approved wet bath simulator or dry gas standard. Use calibration adaptor tubes between the simulator (or cylinder) and mouthpiece to ensure an airtight fit. Allow simulator/cylinder to run for approximately 5 seconds (8 seconds for Dry Gas) and select the “Cal” button on the screen to acquire a sample. Remove from simulator/cylinder. The screen will briefly flash “Wait” and the calibrated value in the third line will be changed (this value is a mixture of letters and numbers).
8. Select  to finish calibration.
9. Verify the calibration by performing an accuracy check test. If an accuracy check is performed through Advanced Settings, the results will not be saved, but the date the check was performed will be recorded.

Safety, Maintenance, & Warranty

Safety

For correct and effective use of the Mercury, it is essential to read and strictly follow the instructions contained in this document. The Mercury is to be used only for the purposes specified herein.

Maintenance

Repairs of the Mercury may only be performed by PAS Systems International, Inc. or an authorized service technician. Only original Mercury parts may be used.

To keep the instrument clean, periodically use a mild disinfectant and a soft cloth on the outside of the case. DO NOT use alcohol to clean the unit!

Warranty

PAS Systems International, Inc. warrants the Mercury to be free of defects in material and workmanship as specified in the warranty. For a complete warranty statement, see the warranty included with the shipment of the Mercury.



DATIA Member



US DOT Approved



CE Approved

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